

What is claimed is:

1. A precoat filter cartridge having
 - a plurality of holding elements, such as supporting rods,
 - a top piece for fixing the cartridge to a dividing wall of a cartridge filter, which top piece is connected to one end of the supporting rods,
 - a terminating piece for dividing off a cartridge internal space with respect to an unfiltrate space,
 - a wire being wound helically onto the holding elements, so that a gap for the passage of liquid is formed between adjacent turns of the wire, the wire forming a cartridge wall as a substrate for a precoat filter layer,
 - the outer diameter of the cartridge being less than 30 mm.
2. The invention of claim 1, wherein said outer diameter is between 20 mm and 28 mm.
3. The invention of claim 1, wherein said outer diameter is about 25 mm.
4. A precoat filter cartridge according to claim 1, wherein the precoat filter cartridge has less than 8 supporting rods.
5. The invention of claim 1, wherein the precoat filter cartridge has 4 to 7 supporting rods.
6. The invention of claim 1, wherein the precoat filter cartridge has 6 supporting rods.
7. The invention of claim 1, wherein, on a side oriented radially inwards, the supporting rods have a cross-sectional taper.
8. The invention of claim 1, wherein, on a side oriented radially inwards, the supporting rods have a rounded portion.

9. The invention of claim 1, wherein the terminating piece tapers towards one end.
10. The invention of claim 1, wherein the top piece has a conical sealing surface at an end that can be brought into contact with the dividing wall.
11. A precoat cartridge filter having a filter vessel with a dividing wall, which divides the filter vessel into an unfiltrate space and into a filtrate space, and a number of precoat filter cartridges fixed to the dividing wall, in particular precoat filter cartridges according to claim 1, extending from the dividing wall into the unfiltrate space, wherein the product of cartridge diameter in mm and cartridge spacing in mm is between 1000 mm^2 and 2300 mm^2 , per meter of filter cartridge length and per m^2 of cross-sectional area of the unfiltrate space.
12. The invention of claim 11, wherein said cartridge spacing is between 1500 mm^2 and 2000 mm^2 , per meter of filter cartridge length and per m^2 of cross-sectional area of the unfiltrate space.
13. The invention of claim 11, wherein the total surface of the cartridge wall of all precoat filter cartridges is more than 10 m^2 , per meter of filter cartridge length and per m^2 of cross-sectional area of the unfiltrate space.
14. The invention of claim 11, wherein the total surface of the cartridge wall of all precoat filter cartridges is more than 12 m^2 , per meter of filter cartridge length and per m^2 of cross-sectional area of the unfiltrate space.
15. A method of using a filter cartridge according to claim 1 in a precoat filter according to claim 11.
16. A method of using a filter cartridge according to claim 1 to replace filter layers of a horizontal filter system thereby forming a cartridge filter.